Technical Data
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Green Products

1F1 THRU 1F7

FAST RECOVERY RECTIFIERS

Reverse Voltage - 50 to 1000 Volts Forward Current - 1.0 Ampere

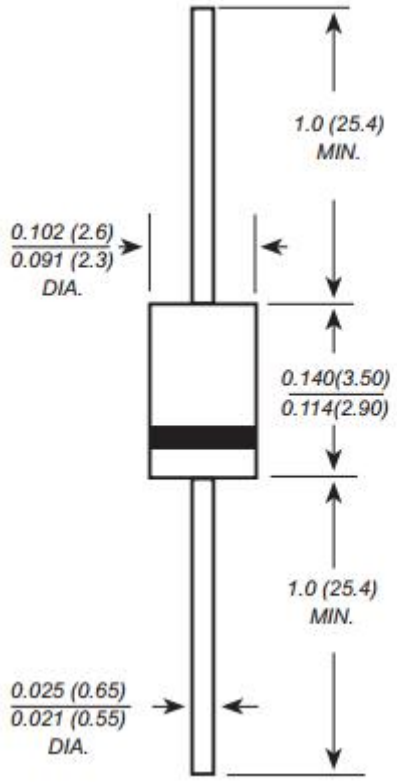
FEATURES

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Fast switching for high efficiency
- Low reverse leakage
- High forward surge current capability
- High temperature soldering guaranteed: 260℃ /10 seconds,0.375”(9.5mm) lead length, 5 lbs. (2.3kg) tension

MECHANICAL DATA

- Case: R-1 molded plastic body
- Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Mounting Position: Any
- Weight:0.007 ounce, 0.20 grams

MECHANICAL DIMENSIONS: In Inches/mm



R-1(XH)

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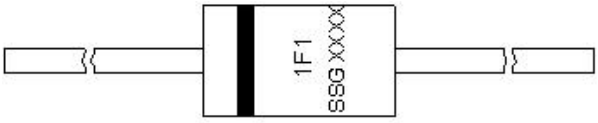
MARKING DIAGRAM



Where XXXXX is YYWWL

1F1	= Part Name
SSG	= SSG
YY	= Year
WW	= Week
L	= Lot Number

Cautions: Molding resin
Epoxy resin UL:94V-0

ORDERING INFORMATION

Device	Package	Shipping
1F1-1F7	R-1 (Pb-Free)	5000pcs / tape

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specification.

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 C ambient temperature unless otherwise specified.
Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

Characteristic	Symbol	1F1	1F2	1F3	1F4	1F5	1F6	1F7	Unit
Maximum repetitive peak reverse voltage Maximum DC blocking voltage	V_{RRM} V_{DC}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum average forward rectified current 0.375”(9.5mm) lead length at @T_A = 25°C	$I_{(AV)}$	1.0							A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	25.0							A
Maximum instantaneous forward voltage at 1.0A	V_F	1.3							V
Maximum DC reverse current @T_A = 25°C At Rated DC Blocking Voltage @T_A = 125°C	I_{RM}	5.0 50							μA
Maximum reverse recovery time (Note 1)	t_{rr}	150				250	500		ns
Typical Junction Capacitance (Note 2)	C_J	15							pF
Typical Thermal Resistance Junction to Ambient (Note 3)	$R_{\theta JA}$	50							°C/W
Operating junction and storage temperature range	T_J, T_{STG}	-55 to +150							°C

Note: 1.Reverse recovery condition IF=0.5A, IR=1.0A, Irr=0.25A
2. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
3. Thermal resistance from junction to ambient at 0.375”(9.5mm)lead length, P.C.B. mounted

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FIG. 1- FORWARD CURRENT DERATING CURVE

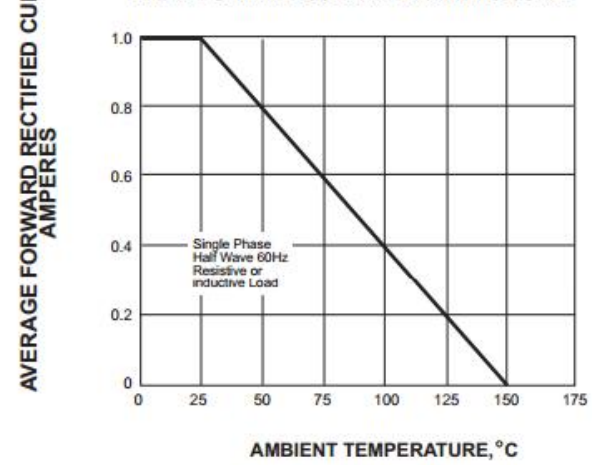


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

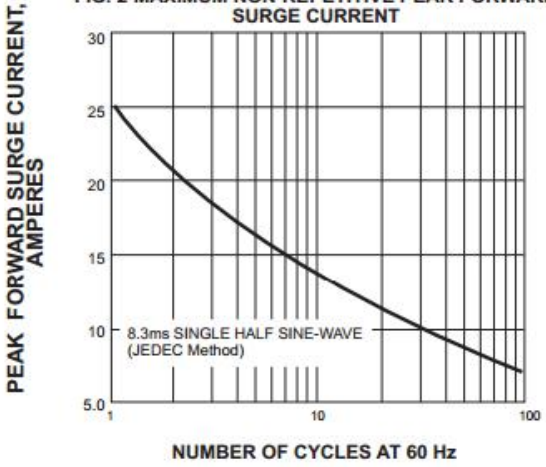


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

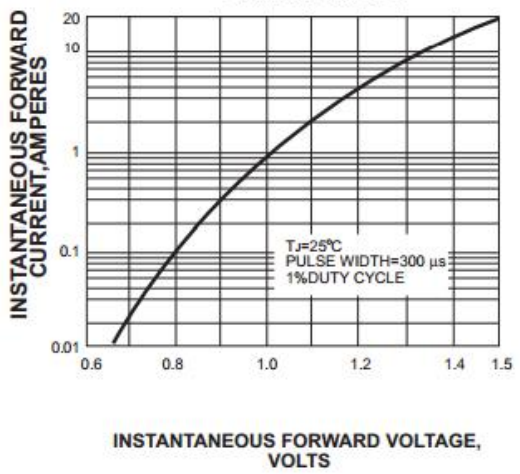


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

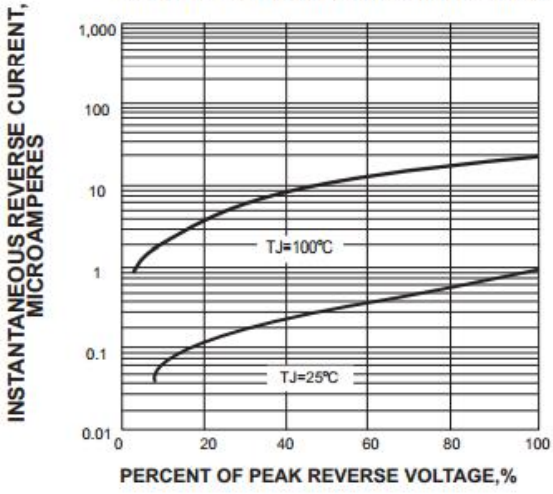


FIG. 5-TYPICAL JUNCTION CAPACITANCE

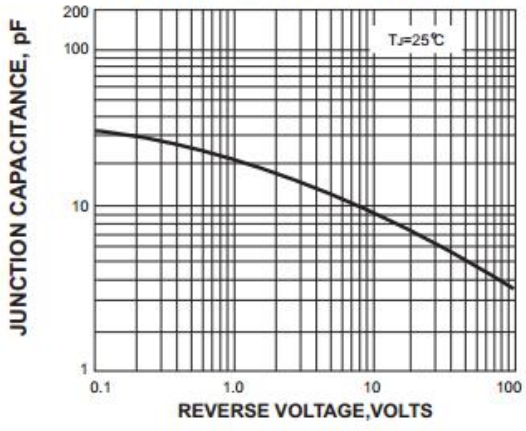
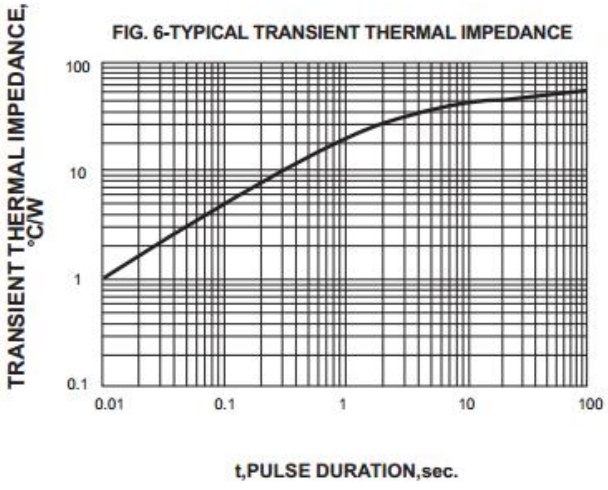


FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE



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